

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

CARDSOFT, INC., et al.

v.

VERIFONE HOLDINGS, INC., et al.

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Case No. 2:08-CV-98-RSP

MEMORANDUM ORDER

On June 8, 2012, a jury returned a verdict finding that Defendant Hypercom Corporation infringes claim 11 of U.S. Patent No. 6,934,945 and claim 1 of U.S. Patent No. 7,302,683. (Verdict, Dkt. No. 389.) The jury found that the asserted claims are not invalid as anticipated. (*Id.*) The jury awarded \$2,245,863 in damages for Hypercom's infringement, and applied a running royalty rate of \$3.00 per unit. (*Id.*) Before the Court are Hypercom's Renewed Motion for Judgment as a Matter of Law (hereinafter "JMOL Mot.", Dkt. No. 426) and Hypercom's Motion for New Trial (hereinafter "NT Mot.", Dkt. No. 427).¹

APPLICABLE LAW

A. Judgment as a Matter of Law

Judgment as a matter of law is appropriate "[i]f a party has been fully heard on an issue during a jury trial and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue" Fed. R. Civ. P. 50(a) & (b). "The grant or denial of a motion for judgment as a matter of law is a procedural issue not unique to patent law, reviewed under the law of the regional circuit in which the appeal from the district court

¹ The Court observes that Hypercom's motions are very similar in content to VeriFone's post-trial motions. At times, Hypercom has failed to change references to VeriFone and VeriFone-related testimony to Hypercom and Hypercom-related testimony. Where possible, the Court has attempted to find the relevant portions of the record in order to evaluate the merits of Hypercom's arguments.

would usually lie.” *Finisar Corp. v. DirectTV Group, Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008).

Under Fifth Circuit law, a court is “especially deferential” to a jury’s verdict, and will not reverse the jury’s findings unless they are not supported by substantial evidence. *Baisden v. I’m Ready Productions, Inc.*, 693 F.3d 491, 499 (5th Cir. 2012). A motion for judgment as a matter of law must be denied “unless the facts and inferences point so strongly and overwhelmingly in the movant’s favor that reasonable jurors could not reach a contrary conclusion.” *Id.* at 498 (citation omitted). In other words, “[t]here must be more than a mere scintilla of evidence in the record to prevent judgment as a matter of law in favor of the movant.” *Arismendez v. Nightingale Home Health Care, Inc.*, 493 F.3d 602, 606 (5th Cir. 2007).

The Court must review all evidence in the record, and draw all reasonable inferences in favor of the nonmoving party. *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000). However, “[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Id.* “[T]he court should give credence to the evidence favoring the nonmovant as well as that ‘evidence supporting the moving party that is uncontradicted and unimpeached, at least to the extent that that evidence comes from disinterested witnesses.’” *Id.* at 151 (citation omitted).

B. New Trial

After a jury trial, the Court may grant a new trial on all or some issues “for any reason for which a new trial has heretofore been granted in an action at law in federal court.” Fed. R. Civ. P. 59(a). “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 612-13 (5th Cir. 1985). When a motion for a new trial questions the sufficiency of the evidence,

the Court must review all the evidence “in a light most favorable to the jury’s verdict” and the motion must be denied “unless the evidence points so strongly and overwhelmingly in favor of one party that the court believes that reasonable persons could not arrive at a contrary conclusion.” *Dawson v. Wal-Mart Stores, Inc.*, 972 F.2d 205, 208 (5th Cir. 1992).

DISCUSSION

A. Direct Infringement

To prove infringement, the patentee must show the presence of every element or its equivalent in the accused device. *Lemelson v. United States*, 752 F.2d 1538, 1551 (Fed. Cir. 1985). Determining infringement is a two-step process: “[f]irst, the claim must be properly construed, to determine the scope and meaning. Second, the claim, as properly construed must be compared to the accused device or process.” *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129 (Fed. Cir. 2011) (citing *Carroll Touch, Inc. v. Electro Mech. Sys., Inc.*, 15 F.3d 1573, 1576 (Fed. Cir. 1993)). To infringe a means-plus-function limitation, “the relevant structure in the accused device [must] perform the identical function recited in the claim and be identical or equivalent to the corresponding structure in the specification.” *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267 (Fed. Cir. 1999). “A determination of infringement is a question of fact that is reviewed for substantial evidence when tried to a jury.” *ACCO Brands, Inc. v. ABA Locks Mfr. Co.*, 501 F.3d 1307, 1311 (Fed. Cir. 2007).

1. “Virtual Function Processor” and “Function Processor Instructions”

Hypercom contends that CardSoft failed to present substantial evidence that Hypercom’s terminals meet the “virtual function processor” and “function processor instructions” limitations. (JMOL Mot. at 5-6.) Hypercom also contends that the jury’s finding that the limitations are present was against the great weight of the evidence and that a new trial is warranted. (NT Mot. at 4-5.) Both limitations are found in the two asserted claims. The Court found that “virtual

function processor” means “software which controls and/or selects general operations of a communication device.” (Claim Construction Order at 20, Dkt. No. 251.) “Function processor instructions” means “a set of instructions that control operation of the communications device.” (*Id.* at 25.)

CardSoft presented Joe Tipton Cole as its technical expert. Mr. Cole testified that he reviewed the source code for Hypercom’s terminals, and found that the source code files containing the “virtual function processors” and “function processor instructions” were located in the “API interface directory.” (6/5 a.m. Tr. 74:14-75:13.) Mr. Cole identified “USB_EXTR.C”, “MDMEXTR.C”, and “USBEXTR.C” as examples of the source code files that he found. (*Id.* at 74:14-20.) Although Mr. Cole’s testimony focused more on the “virtual function processor” limitation, Mr. Cole was specifically asked if he found that both the “virtual function processor” and “function processor instructions” were met, which he confirmed:

Q. And so it’s your – it’s your opinion that the virtual function processor and function processor instructions is found in the accused devices; is that correct?

A. That’s correct.

(*Id.* at 76:17-21.)

In its motion, Hypercom admits that Mr. Cole presented evidence that the “virtual function processor” is present in the Hypercom terminals. However, Hypercom argues that Mr. Cole failed to separately demonstrate that the “virtual function processor” and “function processor instructions” limitations are present, and that this failure violates the all elements rule. (JMOL Mot. at 5-6.) A straightforward reading of Mr. Cole’s testimony shows that he expressed his opinion that both the “virtual function processor” and “function processor instructions” are satisfied. There is nothing in his testimony that suggests he relied on the same portions of the source code files to satisfy both limitations simultaneously. Instead, his testimony is reasonably

clear that the source code files contain both the “virtual function processor” code and the “function processor instructions” code. At no point did Hypercom cross-examine Mr. Cole regarding his opinion that the “function processor limitation” is satisfied. At best, Hypercom points to its own expert’s testimony (Dr. Nettles) where he summarily states that Mr. Cole’s conclusion is wrong, but provides no reasoning or analysis for that opinion. (*See* 6/6 p.m. Tr. 100-01.) Hypercom has not demonstrated any reason why it would be legally improper for the jury to credit Mr. Cole’s testimony over Dr. Nettles’. Therefore, the Court finds that there is substantial evidence to support the jury’s conclusion that the “virtual function processor” and “function processor instructions” limitations are present in Hypercom’s terminals. Moreover, this finding is not against the weight of the evidence.

2. “Virtual Message Processor”

In its renewed motion for judgment as a matter of law, Hypercom argues that CardSoft failed to offer substantial evidence to support the jury’s finding that Hypercom terminals have a “virtual message processor” because Mr. Cole failed to testify that the software he identified “assembles, disassembles, or compares messages.” (JMOL Mot. at 3-4.) Hypercom raises the same issue in its motion for a new trial. (NT Mot. at 6-7.) The Court has found that a “virtual message processor” is “software implemented in the native code of the communications device that processes messages, including assembling, disassembling and/or comparing messages, for communication to and/or from a communications device.” (Claim Construction Order at 19.)

Mr. Cole testified that the software constituting the “virtual message processor” is found in the source code files “USB.C” and “USB.H”. (6/5 a.m. Tr. 79:11-80:1.) In the course of explaining how the “virtual function processor” calls the “virtual message processor,” Mr. Cole explained his contention that that the identified files contain the code used to “construct, build up, and send out” messages. (*Id.* at 77:11-78:9 and 79:11-80:1.) Mr. Cole explained to the jury

how comments in the source code support his understanding that the identified source code meets the “virtual message processor” limitation as construed by the Court. (*Id.* at 82:19-84:2.)

There is no merit to Hypercom’s argument that Mr. Cole simply relies on a physical USB port to satisfy this claim limitation. Although the files pointed to by Mr. Cole have the term “USB” in their names, Mr. Cole clearly relied on software code written by Hypercom to meet this limitation. The Court finds that there is substantial evidence to support the jury’s finding that the Hypercom terminals meet the “virtual message processor” limitation and that the jury’s finding is not against the weight of the evidence.

3. “Message Instruction Means”

Hypercom contends that CardSoft failed to present substantial evidence that Hypercom’s terminals satisfy the “message instruction means” limitation on two separate grounds: (1) that CardSoft failed to show that a “message instruction means” in the Hypercom terminals provides directions for operation of the virtual message processor; and (2) that CardSoft failed to show that the “message instruction means” in the Hypercom terminals is identical or equivalent to the structure disclosed in the patent. (JMOL Mot. at 8-10.) Hypercom raises the same issues in its motion for a new trial. (NT Mot. at 10-11.)

The “message instruction means” is a means-plus-function limitation that is subject to the provisions of 35 U.S.C. § 112, paragraph 6. The claim term has the function of “providing directions for operation of the virtual message processor.” (Claim Construction Order at 24.) The claim term’s corresponding structure is disclosed in the patent at “13:29-14:2; 15:23-34; Figure 11 and Figure 8, and equivalents thereof.” (*Id.*)

In its motion for judgment as a matter of law, Hypercom admits that Mr. Cole identified “USBINPUTREQ” and “USBOUTPUTREQ” as the data structures used to send messages.

(JMOL Mot. at 8 (citing 6/5 a.m. Tr. 77:10-22).) Mr. Cole goes on to testify that these structures perform the function specified in the Court's construction:

So this section here defines something called the USBINPUTREQ, and this identifies the USBOUTPUTREQ. These are data structures that are used to send messages, and the -- the parts of the system that I identify as the -- as the virtual message processor employ these -- these structures, [to] direct the operation of the virtual message processor.

(6/5 a.m. Tr. 77:16-22.) Although Hypercom's expert Dr. Nettles testified that he disagreed with Mr. Cole's understanding of these data structures and how they work (*see* 6/6 p.m. Tr. 99:8-25), the jury was certainly within its rights to credit Mr. Cole's testimony over Dr. Nettles' testimony. The Court finds that there is substantial evidence to support the jury's finding that the structures identified in the Hypercom terminals perform the function required by the "message instruction means." Moreover, the jury's finding in this regard is not against the weight of the evidence.

Turning to Hypercom's second basis for judgment as a matter of law (that the accused structure must be identical or equivalent to the disclosed structure), the Court finds that Mr. Cole testified that the structure he identified in the Hypercom terminals is identical or equivalent to the structures disclosed in the patent.

On direct examination, Mr. Cole identified the "USBINPUTREQ" and "USBOUTPUTREQ" data structures, and testified that they satisfied the "message instruction means" limitation. (*See* 6/5 a.m. Tr. 76:22-79:7.) On cross-examination, Hypercom's counsel examined Mr. Cole on this point:

Q. All right. And for Hypercom, did you find the same literal structure?

A. I'm sorry, the --

Q. With regard to the Hypercom source code you looked at --

A. Right. Right. I'm --

Q. -- did you find the exact identical structure?

A. No, no.

Q. No. But your testimony is it's equivalent because it's communicating the same information in a different way?

A. This is a way -- what I would say is that the patent used a very generic way of communicating what it was talking about, and that specifically what it was talking about for somebody writing a C program is what we saw in the examples that I showed today.

Q. My question really was a little more basic. With regard to your testimony on Hypercom, you agree with me you are not telling this jury that Hypercom source code includes the identical structure, correct?

A. I -- I don't recall seeing a -- in the examples that I showed, I don't recall, for instance, seeing anything concerning a line and column.

Q. So again, just keep it real simple --

A. Right.

Q. -- you did not find in the Hypercom source code a structure that is identical to Figure 11?

A. Correct.

Q. All right. And again, your testimony is, well, it's not identical, but it's equivalent because it's communicating the same information in a different way?

A. Yes.

Q. And in your opinion, that's equivalent?

A. I believe it is, yes.

(6/5 a.m. Tr. 152:8-153:17.) This questioning followed similar questioning by the same lawyer regarding the presence of the same limitation found in a co-defendant's product:

Q. All right. Let's go to Figure 11. Did you find in the VeriFone source code a structure that was identical to Figure 11?

A. I don't recall any pyramids or triangles drawn in the source code, so I'd have to say no.

(*Id.* at 151:18-22.)

It is clear from the context of the testimony that Mr. Cole was readily admitting that the exact illustration found in Figure 11 was not reproduced in either defendants' source code. This is not a surprising admission because the evidence showed that source code files are limited to containing text. This point was explained during CardSoft's redirect of Mr. Cole:

Q. Okay. Is Figure 11 a -- a description of a data structure having fields?

A. Yes.

Q. Okay. Now, Figure 11 is also an image, isn't it?

A. Yes.

Q. Figure 11 is an image in the patent, but it discloses a data structure having fields; is that correct?

A. That's correct.

Q. Okay. And in the accused devices, you found a data structure having fields in every single accused device, didn't you?

A. Yes, sir.

Q. So that claim limitation is found literally. You have the structural limitation, which is identified in Figure 11, found in every accused device; isn't that correct?

A. That's correct. And that was the way I phrased my opinion.

Q. Now, you don't need to find the image in a patent figure and source code, do you?

A. No.

Q. That would be silly, wouldn't it?

A. Well, I don't know, but it's not -- not the way that I have learned to do the work.

(6/5 p.m. Tr. 26:2-27:2.)

In considering the entirety of Mr. Cole's testimony, the Court finds that Mr. Cole's testimony provides substantial evidence to support the jury's finding that the "USBINPUTREQ" and "USBOUTPUTREQ" data structures are equivalent or identical to the structure disclosed by Figure 11 of the patent. The Court also concludes that this finding is not against the weight of the evidence. For the foregoing reasons, the Court denies Hypercom's motion for judgment as a matter of law and motion for a new trial as it relates to the "message instruction means."

4. "Virtual Machine Means" and "Emulatable"

Hypercom moves for judgment as a matter of law and a new trial on several grounds relating to the sufficiency of the evidence for the "virtual machine means" and "emulatable limitations." (JMOL Mot. at 11-15; NT Mot. at 10-14.) The asserted claims require a "virtual machine means," which is "a computer programmed to emulate a hypothetical computer for applications relating to transport of data." (Claim Construction Order at 14.) The asserted claims specify that "the virtual machine means is emulatable in different computers having incompatible hardwares or operating systems." '945 Pat., cl. 1 and '683 Pat., cl. 1. The Court found that this limitation means that the "virtual machine means" is "capable of executing programs on different computers having incompatible hardware or operating systems." (Claim Construction Order at 17.)

First, Hypercom argues that CardSoft failed to present any evidence that Hypercom's terminals have a "virtual machine means," or that the "virtual machine means" satisfies the "emulatable" limitation. (JMOL Mot. at 11.) Hypercom argues that Mr. Cole skipped over the "virtual machine means" limitation and improperly merged the limitation with the "emulatable" limitation. (*Id.*)

Mr. Cole testified that the “emulatable” limitation is met by the Hypercom terminals because Hypercom’s source code implementing the “virtual machine means” is designed to be executable on the Intel/Marvell PXA255 processor and the Zilog ZA9 processor, which are different incompatible processors. (6/5 a.m. Tr. 84:3-85:13.) Although Mr. Cole offered in short form his opinion that the Hypercom terminal software has a “virtual machine means,” Hypercom did not cross-examine² him on the basis for his opinion, and therefore the jury was free to accept or reject this opinion evidence. *See Symbol Techs., Inc. v. Opticon, Inc.*, 935 F.3d 1569, 1576 (Fed. Cir. 1991). The Court finds that there is no merit to Hypercom’s argument that Mr. Cole “skipped” or improperly “merged” the “virtual machine means” limitation.

Next, Hypercom contends that CardSoft failed to present sufficient evidence that the “virtual machine means” is “capable of executing programs on different computers having incompatible hardware or operating systems.” (JMOL Mot. at 11-13.) Hypercom argues that “Cardsoft’s counsel did not even ask Cole whether the alleged virtual machine means on Hypercom terminals actually executes programs” and then states that “[o]n cross-examination, Cole did assert that the virtual machine means executes programs but made no effort explain which portion of the virtual machine means does so or explain how.” (JMOL Mot. at 13.)

On direct examination, Mr. Cole stated that it was his opinion that the “emulatable” limitation was met. (*See* 6/5 a.m. Tr. 84:3-85:13.) To the extent that opinion was not clear, Hypercom’s cross-examination cleared up that point:

Q. So it’s your testimony that on the Hypercom terminals, the virtual machine means that you’ve testified to is executing application programs?

² Hypercom’s briefing suggests that Mr. Cole offered no testimony concerning the “virtual machine means.” The Court observes that some of Hypercom’s cross-examination questioning strongly suggests otherwise. (*See, e.g.*, 6/5 a.m. Tr. 126:15-18 (“the virtual means that you’ve testified to . . .”).)

A. Yes.

(6/5 a.m. Tr. 126:15-18.) Hypercom does not point the Court to where it asked Mr. Cole to explain the basis for this opinion, or otherwise pointed out to the jury that nothing in particular was identified to be the virtual machine means or how it functions. The Court finds that there is no merit to Hypercom's "executing programs" argument.

Hypercom argues that there is insufficient evidence that the "emulatable" limitation is satisfied because Mr. Cole did not analyze whether the "virtual machine means" in the Hypercom terminals is capable of executing programs having an incompatible operating system. (JMOL Mot. at 13-14.) The Court finds that this argument has no merit in light of the Court's construction. The "emulatable" limitation only requires showing that the "virtual machine means" is capable of executing programs on different computers having 1) incompatible hardware or 2) incompatible operating systems. CardSoft clearly presented evidence that the Hypercom "virtual machine means" is capable of executing programs on different computers having incompatible hardware (*e.g.*, different microprocessors).

Lastly, Hypercom argues that CardSoft failed to show that Hypercom's terminals have a "virtual machine means" that is "capable of executing programs on different computers having incompatible hardware or operating systems." (JMOL Mot. at 14-15.) Hypercom's motion has required the Court to review Mr. Cole's testimony concerning the "virtual machine means" and "emulatable" limitations multiple times. As recounted above, Mr. Cole testified that it was his opinion that both limitations were met, and he provided his explanation for those opinions. Hypercom alleges that this testimony was deficient, but does not point to anywhere in the record where it pointed out to the jury the failings that it now complains of in its motion, either on cross-examination or through its rebuttal evidence. After considering all of Hypercom's arguments, the Court finds that there is substantial evidence to support the jury's finding of

infringement for the “virtual machine means” and the “emulatable” limitations. The Court also finds that the jury’s conclusion that the “virtual machine means” and “emulatable” limitations are present in Hypercom’s terminals is not against the weight of the evidence.

B. Exclusion of Certain Opinions of Dr. Nettles

Hypercom moves for a new trial on the basis that the Court improperly struck paragraphs 51, 52, and 64 of Dr. Scott Nettles’ expert report (Hypercom’s technical expert). (NT Mot. at 3-4.) The Court’s order striking these portions of Dr. Nettles’ report set forth in full the opinions that were stricken, as well as the Court’s reasoning for excluding them. (*See* Mem. Order, Dkt. No. 372.) After considering the arguments of the parties, the Court is convinced that the exclusion of those opinions was proper, and that a new trial is not warranted.

CONCLUSION

For the foregoing reasons, Hypercom’s Renewed Motion for Judgment as a Matter of Law (Dkt. No. 426) is **DENIED**, and Hypercom’s Motion for New Trial (No. 427) is **DENIED**.

SIGNED this 27th day of October, 2013.


ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE